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(56) Documents cited

GB 2163464 A

GB 2067699 A

GB 1578747 A

GB 1475543 A

(58) Field of search

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DLCKM DLCKN DLCLB DLEKH DLEKK DLEKMN

DLEKN DLELB, F2H HN HPA

INT CL⁵ E04H

(54) Mesh fencing panel securing means

(57) Means for use in securing mesh fencing panels (11, 12) to a post (13) comprises a block (14) and a screw (15) for securing the block (14) to a post (13); the block having at least one groove but preferably two grooves (16, 17) from end-to-end in one face (18), and a countersunk hole (19) offset from the groove. The screw (15) has a shank (23) fitting within the hole in the block, and a head (25) engaging a shoulder (22) in the hole. A hexagonal drive portion (27) is connected to the head by a shearable neck (31), allowing the screw to be inserted, but not removed.

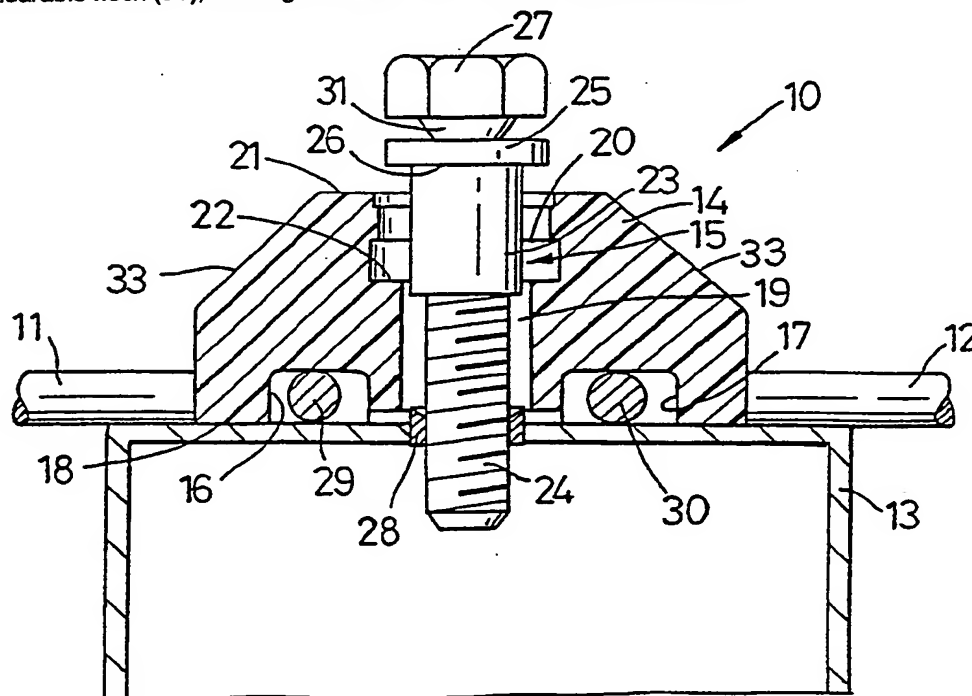


Fig. 3

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

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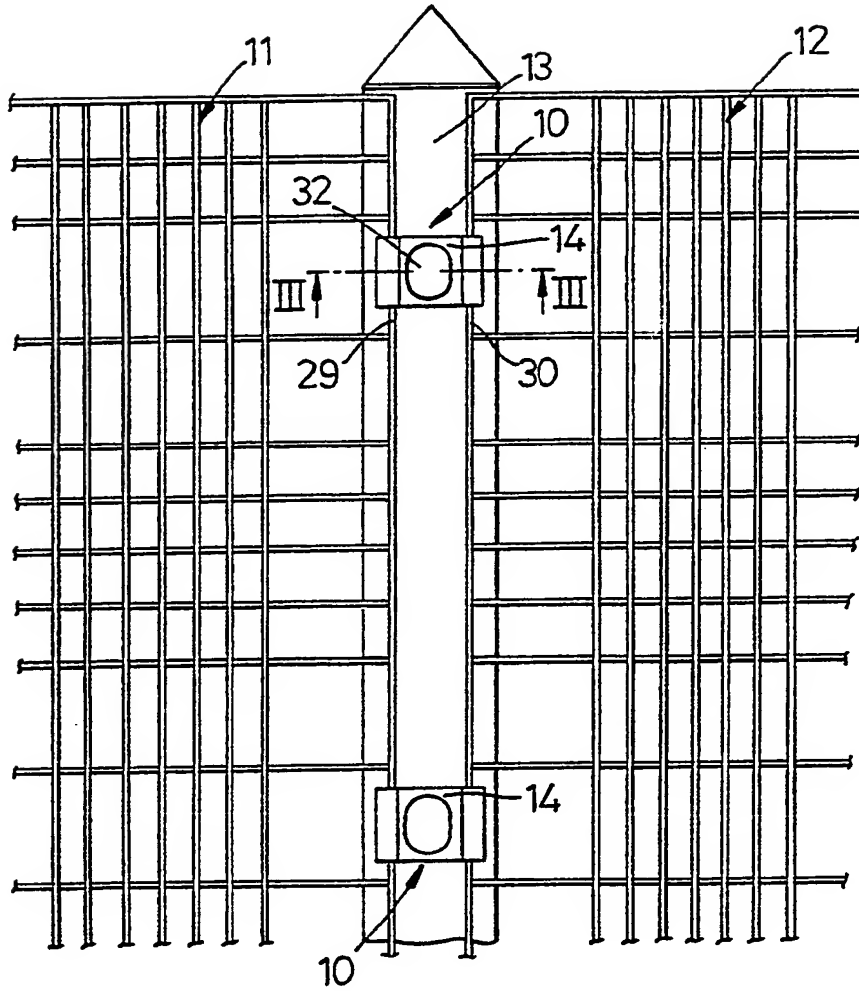


Fig. 1

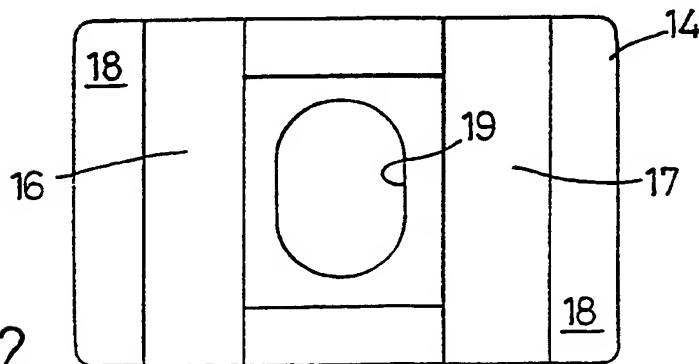
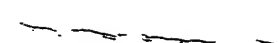


Fig. 2

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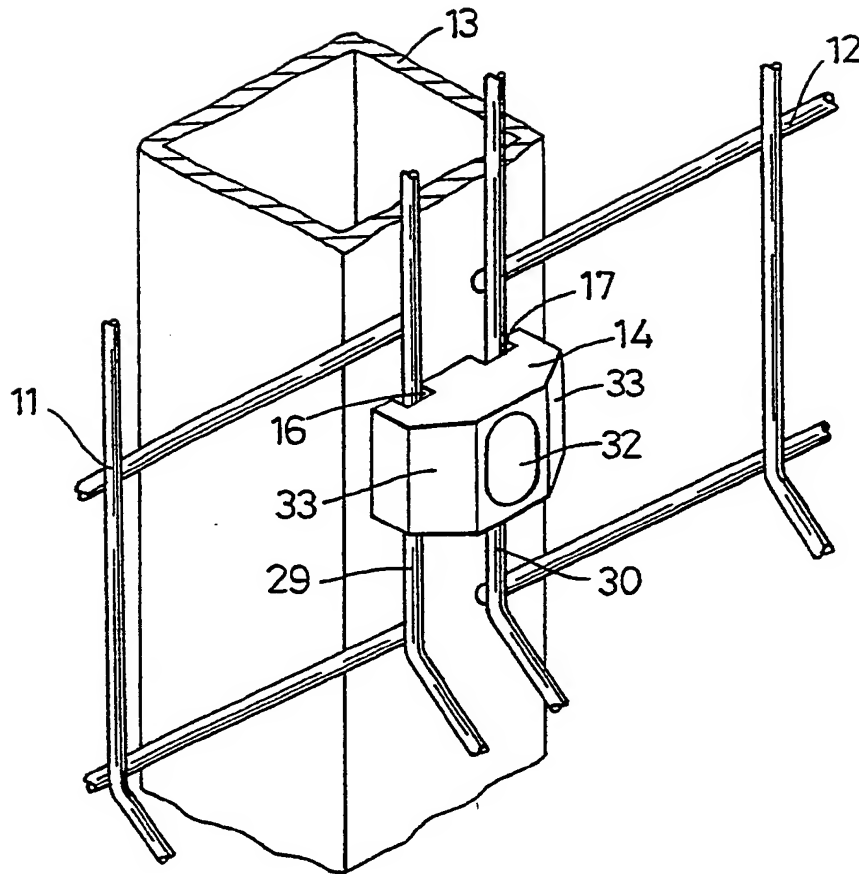


Fig. 5

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MESH FENCING PANEL SECURING MEANS

This invention relates to means for use in securing mesh fencing panels to posts using simple tools and ensuring that the panels cannot be released by an intruder using a conventional screwdriver, spanner or wrench.

5 According to the present invention, means for use in securing mesh fencing panels to posts comprises a block and a screw for securing the block to a post; the block having at least one groove from end-to-end in one face, and an aperture offset from the groove through a recess in the opposite face
10 of the block, with a shoulder between the recess and the aperture; and the screw having a shank fitting within the aperture in the block, a screw-threaded portion extending from one end of the shank, a head on the other end of the shank fitting within the recess in the block, with an annular
15 abutment between the head and shank engaging the shoulder between the recess and the aperture in the block, and means associated with the head to enable the screw-threaded portion to be screwed tight into a post with one side of a mesh of a fencing panel engaged in the groove and against the post, the
20 means associated with the head also being adapted to leave the head of the tightly-screwed screw within the recess non-engageable by a conventional screwdriver, spanner or wrench.

The block preferably has a pair of parallel grooves in the one face, and one to each side of the aperture, so that
25 the block and screw can be used (along with one or more similar blocks and screws) to secure adjacent mesh fencing panels to a common post; only one groove obviously being

utilised in the (or each) block used to secure an end panel to an end post.

The screw-threaded portion of the screw may be a wood-screw for use with a wooden post, or - more usually - it may
5 be a metal screw for screwing into a tapped hole in a metal post, or preferably into a threaded insert in the post.

The means associated with the head is preferably a portion of hexagonal cross-section (or having other means for engagement by a screwdriver, spanner or wrench) connected to
10 the head by a neck which shears when the screw has been screwed tightly into a post, leaving the head within the recess inaccessible to a wrench.

A flush fitting closure plug is preferably provided, for the recess, for discouraging or preventing access to the
15 screw-head, which plug may be a snap-fit in the recess and/or secured by adhesive.

The cross-sections of the aperture and the recess are preferably elongated in the direction parallel to the groove or grooves, to allow some adjustment of the positioning of a
20 mesh panel or panels. The flanks of the face at which the recess emerges are preferably bevelled, in order to "streamline" the block somewhat in the longitudinal direction of fencing, and/or all the exposed edges and corners of the block are preferably slightly rounded.

25 The block is preferably formed of nylon, but could be formed of any other suitable plastics material.

The invention will now be described, by way of example only, with reference to the accompanying drawings in which:-

Figure 1 is an elevation of part of a post showing sections of adjacent fencing panels secured to the post by means in accordance with the invention;

Figure 2 is rear elevation of one of the blocks of
5 Figure 1;

Figure 3 is a section of the line III-III of Figure 1 but shows the screw only partially screwed into the post;

Figure 4 corresponds to Figure 3 but shows the screw fully screwed into the post with the hexagonal portion of its
10 head removed and a plug inserted into the block; and

Figure 5 is a perspective of one of the means of Figure 1.

In the Figures means 10 for securing mesh fencing panels 11 and 12 to a post 13 comprises a block 14 and a screw
15 15 for securing the block to the post. The block 14 has grooves 16 and 17 in one face 18 and an aperture 19 offset from the grooves 16, 17 through a recess 20 in an opposite face 21 of the block with a shoulder 22 between the recess 20 and the aperture 19. The screw 15 has a shank 23 fitting
20 within the aperture 19 in the block 14, a screw-threaded portion 24 extending from end of the shank 23, a head 25 on the other end of the shank 23 fitting with the recess 20 in the block, with an annular abutment 26 between the head 25 and the shank 23 to engage (see particularly Figure 4) the
25 shoulder 22 between the recess 20 and the aperture 19 in the block 14. A portion 27 of hexagonal cross-section for engagement by a spanner or wrench (not shown) to enable the screw-threaded portion 24 to be screwed tight into a threaded

insert 28 in the post with one side 29, 30 of respective panels 11, 12 engaged in respective grooves 16, 17 and against the post. The hexagonal portion is connected to the head by a neck 31 which shears when the screw has been screwed tightly
5 into the post leaving the head within the recess inaccessible to a wrench. A flush fitting plug 32 (see particularly Figure 4) is inserted into the recess to discourage access to the head and to enhance the appearance of the block when in use.

10 Referring to Figure 2 the cross-section of the operative 19 and the recess 20 are elongated in the direction parallel to the grooves 16, 17 to allow some adjustment of the positioning of the panels 11, 12.

The flanks of the face 21 are provided with bevels 33.

CLAIMS

1. Means for use in securing mesh fencing panels to posts comprising a block and a screw for securing the block to a post; the block having at least one groove from end-to-end in one face, and an aperture offset from the groove through a recess in the opposite face of the block, with a shoulder between the recess and the aperture; and the screw having a shank fitting within the aperture in the block, a screw-threaded portion extending from one end of the shank, a head on the other end of the shank fitting within the recess in the block, with an annular abutment between the head and shank engaging the shoulder between the recess and the aperture in the block, and means associated with the head to enable the screw-threaded portion to be screwed tight into a post with one side of a mesh of a fencing panel engaged in the groove and against the post, the means associated with the head also being adapted to leave the head of the tightly-screwed screw within the recess non-engageable by a conventional screwdriver, spanner or wrench.

2. Means for use in securing mesh fencing panels to posts as claimed in Claim 1, wherein the block, has a pair of parallel grooves in the one face.

3. Means for use in securing mesh fencing panels to posts as claimed in Claim 2, wherein the grooves are provided one to each side of the aperture.

4. Means for use in securing mesh fencing panels to posts as claimed in any preceding Claim, wherein the screw-threaded portion of the screw is a wood-screw for use with a

wooden post.

5. Means for use in securing mesh fencing panels to posts as claimed in any one of Claims 1 to 3, wherein the screw-threaded portion of the screw is a metal screw for
5 screwing into a tapped hole in a metal post.

6. Means for use in securing mesh fencing panels to posts as claimed in any one of Claims 1 to 3, wherein the screw-threaded portion of the screw is a metal screw for screwing into a threaded insert in a metal post.

10 7. Means for use in securing mesh fencing panels to posts as claimed in any preceding Claim, wherein the means associated with the head is a portion of hexagonal cross-section (or having other means for engagement by a screwdriver, spanner or wrench) connected to the head by a
15 neck which shears when the screw has been screwed tightly into a post.

8. Means for use in securing mesh fencing panels to posts as claimed in any preceding Claim, wherein a flush fitting closure plug is provided, for the recess, for
20 discouraging or preventing access to the screw-head.

9. Means for use in securing mesh fencing panels to posts as claimed in Claim 8, wherein the plug is snap-fit in
the recess.

10. Means for use in securing mesh fencing panels to
25 posts as claimed in either Claim 8 or Claim 9, wherein the plug is secured by adhesive.

11. Means for use in securing mesh fencing panels to posts as claimed in any preceding Claim, wherein the cross-

sections of the aperture and the recess are elongated in the direction parallel to the groove or grooves, to allow some adjustment of the positioning of a mesh panel or panels.

12. Means for use in securing mesh fencing panels to
5 posts as claimed in any preceding Claim, wherein the flanks of the face at which the recess emerges are bevelled.

13. Means for use in securing mesh fencing panels to posts as claimed in any preceding Claim, wherein the block is formed in plastics material.

10 14. Means for use in securing mesh fencing panels to posts as claimed in any preceding Claim, wherein the block is formed of nylon.

15 15. Means for use in securing mesh fencing panels to posts substantially as hereinbefore described with reference to the accompanying drawings.

Patents Act 1977
Examiner's report to the Comptroller under
Section 17 (The Search Report)

Application number
 9122959.1

Relevant Technical fields

(i) UK Cl (Edition K) E1D (DF109, DLCKH, DLCKK, DLCKM,
 DLCKN, DLCLEB, DLEKH, DLEKK,
 DLEKMN, DLEKN, DLEB)
 E04H
 (ii) Int Cl (Edition 5)

Search Examiner

D J LOVELL

Date of Search

27 FEBRUARY 1992

Databases (see over)

(i) UK Patent Office

(ii)

Documents considered relevant following a search in respect of claims 1-15

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
Y	GB 2163464 A (ROBBINS)	1
Y	GB 2067699 A (FERRANTI MEASUREMENTS)	1
Y	GB 1578747 (SANGAMO WESTON LTD)	1
Y	GB 1475543 (FERRANTI LTD)	1

Category	Identity of document and relevant passages	Relevant to claim

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Patents Act 1977
Examiner's report to the Comptroller under
Section 17 (The Search Report)

Application number

9122959.1

Relevant Technical fields

(i) UK CI (Edition K) (CONT)
 F2H (HN, HPA)

(ii) Int CI (Edition)

Databases (see over)

(i) UK Patent Office

(ii) ONLINE DATABASE: WPI

Search Examiner

Date of Search

Documents considered relevant following a search in respect of claims

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)

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